# Honeywell

# 4909 and 4908 **Conductivity Cells**

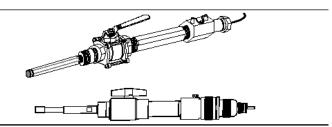
Model Selection Guide 51-52-16-15 Issue 20

- Allows insertion or removal of cell without
- interuption to process
- Available in 316 stainless steel or CPVC •
- Allows safe removal at pressures up to 50 psi

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# **Model Selection Guide** with Price Data

Honeywell Proprietary



Top: 4909 SS Insertion/Removal Cell Assembly Bottom: 4909 CPVC Plastic Insertion/Removal Cell Assembly

## Instructions

ſ	<ul> <li>Consult <u>Steps to Selecting Appropriate Conductivity Instrumentation and Cells</u> before</li> </ul>	
	making selections below.	
	<ul> <li>Select the desired key number. The arrow to the right marks the selection available.</li> </ul>	
	<ul> <li>Make one selection from each Table using the column below the proper arrow.</li> </ul>	List Price equals
	A dot denotes unrestricted availability.	the sum of all
		prices for all
	Key Number         I         II         IV         VI         VII	selections made.
	<u>      <sup>-</sup>     <sup>-</sup>   <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>     <sup>-</sup>         <sup>-</sup>                                    </u>	

## **KEY NUMBER**

KEY NUMBER			Av	aila	bility
Description					
04909 Complete Conductivity Cell Assembly	(Notes 2 & 3)	04909			
04908 Replacement Cell Only	(Notes 1 & 3)	04908		$\downarrow$	

## **TABLE I - Cell Constant**

0.01	001	•	•
		•	•
1		•	•
10		•	•
50	X50	k	k
	0.1 1 10	0.1 X01 1 XX1 10 X10	0.1 X01 • 1 XX1 • 10 X10 •

## **TABLE II - Electrode Material**

Electrode Material	Nickel	33	•	•
Note 6	Platinum	44	٠	•

# **TABLE III - Automatic Temperature Compensation**

Available for APT2000/4000CC, 9782C, or 7082 Only	333	f	f	

			049		
			_	$\checkmark$	$\overline{\mathbf{v}}$
TABLE IV - Leadwire Length			Selection	09	08
Leadwire Length	20 ft. (6,10 meters) Leadwire	(Note 6)	20	•	•
	Junction Head (Aluminum)		X1	•	•

## TABLE V - Valve/Cell Materials

Valve/Cell Material	Material			
4909 Stainless Steel (SS) Valve	Includes SS Valve assembly and	02	С	
Assembly	Standard insertion cell	02		
4908 PES Replacement Cell for	Standard insertion cell only	02		С
4909 SS Valve Assembly	Standard insertion cell only	02		
	Includes CPVC assembly and		d	
4909 CPVC Valve Assembly	standard CPVC Support tube	03		
	and cell			
4908 PES Replacement Cell for	Cell only	03		d
CPVC Valve Assembly	Centoniy	03		

# **TABLE VI - Special Mounting Options**

Special Mounting Options - select one of	option per unit			
None		000	•	٠
SS support tube for 4909 SS Valve		930	e,	
assemblies only. Use Table V			m	
Option = 02				
4908 replacement cells for 4909 SS		930		e,
Valve Assembly containing SS Support				m
tube. Use Table V Option = 02				
Special insertion lengths for new/	Uses special insertion cell to	910	h,	h,
replacement cells for 4909 SS	increase standard insertion		m	m
Valve Assemblies. Only available	cell depth by 4.4" (111,76 mm)			
for Table V Option = 02				

### **TABLE VII - OPTIONS**

Tagging	None		0_	•	•
	Linen		L_	•	•
	Stainless Steel		S_	•	•
Certificate of Calibration	None	(Note 5)	_ 0	•	•
	Calibration & Conformance	(Note 5)	_3	•	•

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#### Notes:

- 1. Replacement cells only, caution look at Restrictions for insertion depth dimensions based on valve assembly type.
- 2. When converting from 4806 to 4909, order 4908 directly.
- 3. Replacement 4908 cells for existing 4908's and 4909's manufactured before 8/85 must specify Table V = 02.
- **4.** The current selection system requires that Option 1 or 2 be chosen if a certificate is to be sent along with any of the available 4909/4908 cells.
- 5. Platinum is used in acid and base applications; Nickel is used in all others.
- 6. If shorter length is required, cut to length, skin and tin ends.

#### RESTRICTIONS

Restriction Letter		Available Only With		Not Available With
	Table	Selection	Table	Selection
С	V	Standard insertion cell for SS valve assem	blies cons	sists of a conductivity
		cell of variable length based on the cell cor		
		PES tube molded to the cell. The conduction	vity cell in	nsertion depth is
		listed below:		
		001, X01, XX1 = 7.5 in. (190,50 mm)		
		X10 = 7.7 in. (195,58 mm)		
		X25, X50 = 8.8 in. (223,52 mm)		
d	V	Standard conductivity cell insertion depth of		is according to cell
		constants for CPVC assemblies is listed be	elow:	
		001, X01, XX1 = 5.5 in. (139,70 mm)		
		X10 = 5.7 in. (144,78 mm)		
		X25, X50 = 6.8 in. (172,72 mm)		V05 V50
е	V	02		X25, X50
t		For APT2000/4000CC,		
ļ		9782C, or 7082 Only		
h	V	02		
k		For 9782C and 7082 Only		
m				
		"Consult Ft. Washington for other		
		temperature compensator selections"		

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# 4909 and 4908 Conductivity Cells

# Accessories and Replacement Parts

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Accessory Parts	Part Number
Junction Box	31316260
Ball Valve Removal device	
316 SS (doesn't include 4908 Cell)	31741450
CPVC (doesn't include 4908 Cell)	31074357
CPVC Support tube. Used in 31074357 to extend cell insertion depth by 6".	31074344
Allow additional 6" for cell removal.	
SS Support Tube for use with: Table IV = X7 or 20 , Table V = 02, Table VI = 930	51450837-001
SS Support Tube for use with: Table IV = X1, Table V = 02, Table VI = $930$	51450838-001
Cell Extension Leadwire	
For ATC value of 333:	
Standard Range 9782 or 7082, also APT2000	
To 1000 ft:	
3-conductor, 18 gage cable (Belden 9493) and	834059
Coax cable (Belden 9259)	835024
Wide Range 9782 and 7082	
To 1000 ft:	
4-conductor, 18 gage, cable only	31834052
For all cells with an ATC other than 333:	
3-conductor, 18 gage cable (Belden 9493) only	834059
Direction Manual for 4909 & 4908	
CPVC	70-82-25-19
Stainless Steel	70-82-25-68

### **Replacement Parts**

Viton Packing Gland for 1-1/4" NPT SS Assembly	31071494
Viton Packing Gland for 1-1/4" NPT Plastic Assembly	31074345